



YETDA INDUSTRY LTD.

5mm Red Color Super Bright LED Lamps Q500ICI1D

5mm with AlGaInP Dice ◦

Encapsulated with Red Diffused Package with 2 leads ◦

Long Leads ◦

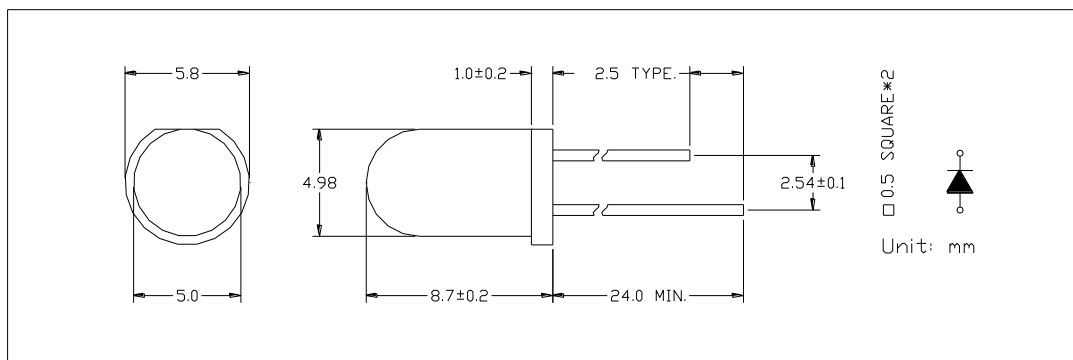
Absolute Maximum Ratings : (Ta=25°C)

| Parameter | Symbol | Maximum Rating | Unit |
|---|------------------|------------------|------|
| Power Dissipation | PD | 100 | mw |
| Reverse Voltage | VR | 5 | V |
| Average Forward Current | LAF | 30 | mA |
| Peak Forward Current (Duty=0.1,10KHZ) | IPF | 200 | mA |
| Operatating Temperature Range | T _{OPR} | -20°C to +80 °C | |
| Storage Temperature Range | T _{STG} | -40°C to +100 °C | |
| Lead Soldering Temperature { 1.6mm(0.063inch) From Body } 260°C For 3 Seconds | | | |

Electro-Optical Characteristics (Ta = 25°C)

| Parameter | Test Condition | Symbol | Min. | Typ. | Max. | Unit |
|--------------------|-----------------------|----------------|------|------|------|------|
| Forward Voltage | I _F = 20mA | V _F | | 2.0 | 2.4 | V |
| Reverse Current | V _R = 5V | I _R | | | 10 | uA |
| Luminous Intensity | I _F = 20mA | I _v | 250 | 400 | | mcd |
| Wavelength | I _F = 20mA | λ _d | | 625 | | nm |
| Viewing Angle | I _F = 20mA | 2θ 1/2 | | 80 | | deg |

Item: 500



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Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

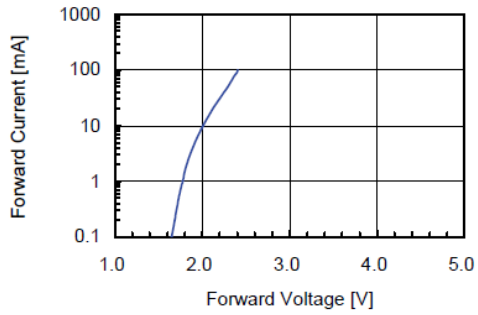


Fig 2. Relative Intensity vs. Forward Current

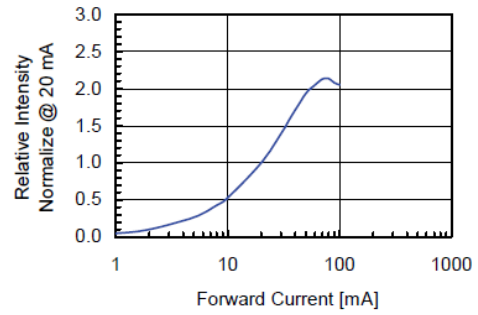


Fig 3. Forward Voltage vs. Temperature

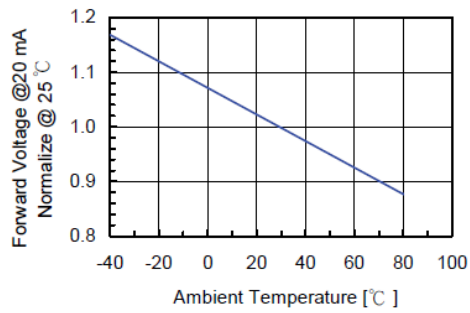


Fig 4. Relative Intensity vs. Temperature

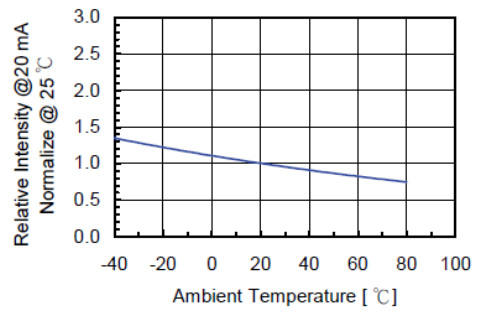
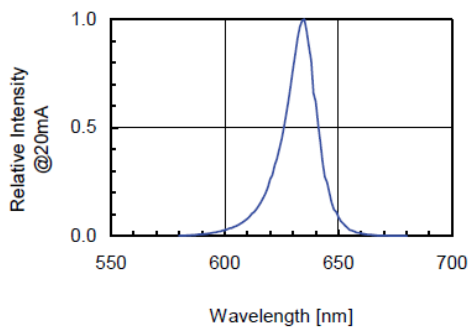


Fig 5. Relative Intensity vs. Wavelength





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Soldering:

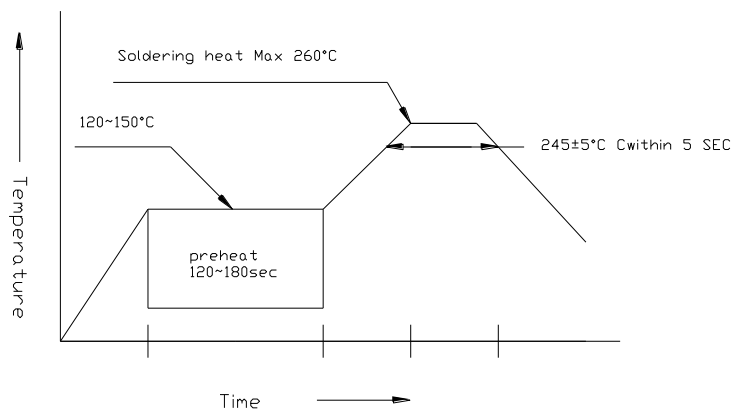
1. Manual of soldering

The temperature of the iron tip should not be higher than 260°C and Soldering within 3 seconds per solder-land is to be observed

2. DIP soldering (Wave Soldering):

Preheating: $120^{\circ}\text{C} \sim 150^{\circ}\text{C}$ within 5 sec. 260°C (Max)

Gradual Cooling (Avoid quenching)



•Handling:

Care must be taken not to cause to the epoxy resin portion of Yetda LEDS while it is exposed to high temperature.

Care must be taken not rub the epoxy resin portion of Yetda LEDS with hard or sharp article such as the sand blast and the metal hook